

Title (en)

Process and apparatus for production of monocrystalline and macrocrystalline layers, by example for photovoltaic cells.

Title (de)

Verfahren und Vorrichtung zur Herstellung von einkristallinen und makrokristallinen Schichten, zum Beispiel für Fotozelle.

Title (fr)

Procédé et appareil de fabrication de couches monocristallines et macrocristallines, notamment pour cellules photovoltaïques.

Publication

EP 0129159 A1 19841227 (EN)

Application

EP 84106522 A 19840607

Priority

FR 8309611 A 19830609

Abstract (en)

The invention relates to production of macrocrystalline and monocrystalline layers. It includes irradiating a polycrystalline layer by sweeping the surface of said layer with a beam focused along a line having a constant power density. Layer material melts in all its thickness but is not vaporised at its outer surface. Material solidifies by forming macrocrystals or, if a seed is provided, a monocrystal. The process is useful for photovoltaic cells.

IPC 1-7

C30B 13/24; **C30B 29/60**

IPC 8 full level

H01L 21/263 (2006.01); **C30B 13/00** (2006.01); **C30B 13/24** (2006.01)

CPC (source: EP)

C30B 13/00 (2013.01); **C30B 13/24** (2013.01); **C30B 29/60** (2013.01)

Citation (search report)

- [X] DE 2638269 A1 19780302 - WACKER CHEMITRONIC
- [XD] LU 65027 A1 19720711
- [X] DE 2917353 A1 19810312 - DORNIER SYSTEM GMBH

Cited by

US5614020A; DE19681075B4; WO9621054A1; WO2006008302A3

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0129159 A1 19841227; BR 8406926 A 19850604; ES 533240 A0 19850201; ES 8503039 A1 19850201; FR 2547319 A1 19841214; FR 2547319 B1 19871009; JP S60501501 A 19850912; WO 8404935 A1 19841220

DOCDB simple family (application)

EP 84106522 A 19840607; BR 8406926 A 19840607; EP 8400169 W 19840607; ES 533240 A 19840608; FR 8309611 A 19830609; JP 50245684 A 19840607